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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/763,979	01/22/2004	George Hradil	81394-499	7882
28765	7590	05/10/2006	EXAMINER	
WINSTON & STRAWN LLP			WONG, EDNA	
1700 K STREET, N.W.				
WASHINGTON, DC 20006			ART UNIT	PAPER NUMBER

1753

DATE MAILED: 05/10/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Advisory Action
Before the Filing of an Appeal Brief**

Application No.

10/763,979

Applicant(s)

HRADIL, GEORGE

Examiner

Edna Wong

Art Unit

1753

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 01 May 2006 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. ☐ The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:

- a) ☒ The period for reply expires 3 months from the mailing date of the final rejection.
b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.

Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

NOTICE OF APPEAL

2. ☐ The Notice of Appeal was filed on _____. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

AMENDMENTS

3. ☐ The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because
(a) ☐ They raise new issues that would require further consideration and/or search (see NOTE below);
(b) ☐ They raise the issue of new matter (see NOTE below);
(c) ☐ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
(d) ☐ They present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: _____. (See 37 CFR 1.116 and 41.33(a)).

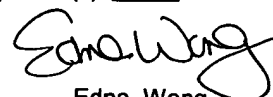
4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).
5. ☐ Applicant's reply has overcome the following rejection(s): _____.
6. ☐ Newly proposed or amended claim(s) _____ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).
7. ☒ For purposes of appeal, the proposed amendment(s): a) ☐ will not be entered, or b) ☒ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.
The status of the claim(s) is (or will be) as follows:
Claim(s) allowed: _____.
Claim(s) objected to: _____.
Claim(s) rejected: 19 and 21-37.
Claim(s) withdrawn from consideration: _____.

AFFIDAVIT OR OTHER EVIDENCE

8. ☐ The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).
9. ☐ The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing of good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).
10. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

REQUEST FOR RECONSIDERATION/OTHER

11. ☒ The request for reconsideration has been considered but does NOT place the application in condition for allowance because:
See pages 2-9.
12. ☐ Note the attached Information Disclosure Statement(s). (PTO/SB/08 or PTO-1449) Paper No(s). _____.
13. ☐ Other: _____.


Edna Wong
Primary Examiner
Art Unit: 1753

ADVISORY ACTION

This is in response to the Amendment dated May 1, 2006. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Response to Arguments

Claim Rejections - 35 USC § 103

I. Claims **1-12** have been rejected under 35 U.S.C. 103(a) as being unpatentable over **JP 2-301588** ('588).

The rejection of claims 1-12 under 35 U.S.C. 103(a) as being unpatentable over JP 2-301588 ('588) has been withdrawn in view of Applicant's amendment. Claims 1-12 have been cancelled.

II. Claim **19** has been rejected under 35 U.S.C. 103(a) as being unpatentable over **JP 2-301588** ('588) ~~as applied to claims 1-12 above.~~

The rejection of claim 19 under 35 U.S.C. 103(a) as being unpatentable over JP 2-301588 ('588) ~~as applied to claims 1-12 above~~ is as applied in the Office Actions dated November 9, 2005 and February 22, 2006 and incorporated herein. The rejection has been maintained for the following reasons:

Applicant states that while a pH of 3.5 to 5.5 is included within the range, there is no importance or criticality attached to it.

In response, where Applicant claims a method in terms of a function, property or characteristic and the method is similar as that of the claims but the function is not explicitly disclosed by the reference, there is no requirement that the function be expressly articulated in the reference. References are evaluated by what they collectively suggest to one versed in the art, rather than by their specific disclosures. *In re Simon* 174 USPQ 114 (CCPA 1972); *In re Richman* 165 USPQ 509, 514 (CCPA 1970).

There is no requirement that a person having ordinary skill in the art would have recognized the importance or criticality of a pH of 3.5 to 5.5 when the subject matter is in the prior art reference. The discovery of a previously unappreciated property of a prior art method, or of a scientific explanation for the prior art's functioning, does not render the old method patentably new to the discoverer.

Applicant states that the examples of the '588 reference have pHs between 6 and 7.5, and this suggests that optimum performance is found when a near-neutral electroplating solution is used. In contrast, the present invention requires a pH of between 3.5 and 5.5 and preferably around 4 for best results. Thus, the skill artisan is not motivated to use the presently claimed pH range.

In response, disclosed examples and preferred embodiments do not constitute a teaching away from a broader disclosure or non-preferred embodiment (MPEP § 2123).

A prior art reference must be considered in its entirety, i.e., as a whole, including

portions that would lead away from the claimed invention. *W.L. Gore & Associates, Inc. v. Garlock, Inc.*, 721 F.2d 1540, 220 USPQ 303 (Fed. Cir. 1983), *cert. Denied*, 469 U.S. 851 (1984). In addition, a known or obvious composition does not become patentable simply because it has been described as somewhat inferior to some other product for the same use, see *In re Gurley*, 27 F.3d 551, 554, 31 USPQ2d 1130, 1132 (Fed. Cir. 1994). Further, a reference may be relied upon for all that it would have reasonably suggested to one having ordinary skill in the art, including nonpreferred embodiments, see *Merck & Co. v. Biocraft Laboratories*, 874 F.2d 804, 10 USPQ2d 1843 (Fed. Cir.), *cert. denied*, 493 U.S. 975 (1989). See MPEP § 2141.02, MPEP 2145X.D.1 and MPEP § 2123.

Applicant state that the '588 reference also fails to disclose or teach the importance of the claimed complexing agent to metal ion concentration ratio.

In response, the Applicant has a different reason for, or advantage resulting from doing what the prior art relied upon has suggested, it is noted that it is well settled that this is not demonstrative of nonobviousness. *In re Kronig* 190 USPQ 425, 428 (CCPA 1976); *In re Linter* 173 USPQ 560 (CCPA 1972); the prior art motivation or advantage may be different than that of Applicants while still supporting a conclusion of obviousness. *In re Wiseman* 201 USPQ 658 (CCPA 1979); *Ex parte Obiaya* 227 USPQ 58 (Bd. of App. 1985) and MPEP § 2144.

JP '588 teaches that the tin and lead ion concentration can be selected

arbitrarily, normally in the range of 0.5~200 g/l, but preferably in the range of 1~100 g/l (page 3, lines 5-6). The complexors addition quantity may vary but normally in the range of 3~800 g/l, and preferably in 40~400 g/l (page 3, lines 12-13). The preferred ranges include ratios that overlap with Applicant's ratio of between about 2:1 and 9:1. The preferred ranges of metal ions and complexors would have led a skilled artisan to use values which are in Applicant's claimed ratio range.

III. Claims 13-18 have been rejected under 35 U.S.C. 103(a) as being unpatentable over **JP 2-301588** ('588).

The rejection of claims 13-18 under 35 U.S.C. 103(a) as being unpatentable over JP 2-301588 ('588) has been withdrawn in view of Applicant's amendment. Claims 13-18 have been cancelled.

IV. Claim 20 has been rejected under 35 U.S.C. 103(a) as being unpatentable over **JP 2-301588** ('588) as applied to claims 13-18 above.

The rejection of claim 20 under 35 U.S.C. 103(a) as being unpatentable over **JP 2-301588** ('588) as applied to claims 13-18 above has been withdrawn in view of Applicant's amendment. Claim 20 has been cancelled.

Response to Amendment

Claim Objections

Claim 35 is objected to because of the following informalities:

Claim 35

line 2, "dehydoascorbic acid" should be amended to -- dehydroascorbic acid --.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

Claims 27-28 and 33 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 27

line 2, it appears that "a surfactant in an amount sufficient to enhance deposit quality and grain structure" is further limiting the solution recited in claim 1, lines 2-16. However, it is unclear if it is. If it is, then it is suggested that the word "includes" be amended to the word -- further comprises --.

Claim 33

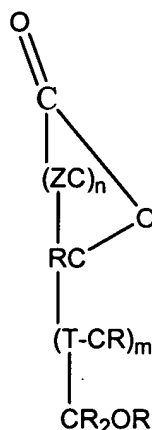
line 1, "the metal ions" (plural) lack antecedent basis.

Claim Rejections - 35 USC § 103

I. Claims 21-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over

JP 2-301588 ('588) as applied to claim 19 above.

JP '588 teaches wherein the complexing agent has the structure:



wherein each R is the same or different and is hydrogen or a lower alkyl group of 1 to 3 carbon atoms, T is R, OR, or $\text{O}=\text{P}(\text{OR})_2$, Z is O= or $\text{RO}-$, n is 2-4 and Z can be the same or different in each occurrence in the compound, and m is 1-3 (= ascorbic acid, 2-ketogluconic acid, and glucuronic acid) [page 3, lines 7-11].

The complexing is ascorbic acid, isoascorbic acid, dehydroascorbic acid, glucoascorbic acid, galacturonic acid, glucuronic acid, or a salt thereof, or is derived from a ketogluconate or heptagluconate (= ascorbic acid, 2-ketogluconic acid, glucuronic acid) [page 3, lines 7-11] and is present in an amount of about 25 to 200 g/l (= in the range of 3~800 g/l) [page 3, lines 12-13].

The metal ion is a tin ion and is added to the solution as a stannous alkyl sulfonate salt, a stannous sulfate salt, a stannous chloride salt, a stannous ascorbate salt, or stannous oxide (= tin sulfate, tin chloride, tin methane sulfonate, tin oxide) [page 2, line 42 to page 3, line 4] and is present in an amount of between about 5 and 100 g/l

(= in the range of 0.5~200 g/l) [page 3, line 5-6].

The metal ion includes a divalent lead salt (page 3, lines 3-4) in an amount sufficient to deposit a tin-lead alloy from the solution (= in the range of 0.5~200 g/l) [page 3, line 5-6; and page 4, lines 31-32].

The solution further comprises a conductivity salt a conductivity salt (page 3, lines 19-23) in an amount (= 0~800 g/l) [page 3, lines 23-24] sufficient to increase the conductivity of the solution.

The conductivity salt is an alkali or alkaline metal sulfate, sulfonate, or acetate compound (= sodium sulfate) [page 3, lines 19-21].

The solution further comprises a surfactant in an amount (= 0.01~30 g/l) [page 3, lines 41-43] sufficient to enhance deposit quality and grain structure.

The surfactant is an alkylene oxide condensation compound (page 3, lines 33-38) and is present in an amount of about 0.01 to 20 g/l (= 0.01~30 g/l) [page 3, lines 41-43].

The substrates are composite articles having electroplatable and non-electroplatable portions (= metal/ceramic and metal/glass composite substrates) [page 4, lines 33-35], the pH adjusting agent is an acid or a base (page 3, lines 25-29) and the pH is adjusted to the range of about 3.5 to 5.5 (= pH 2~9) [page 4, lines 13-15] to enable electroplating of the electroplatable portions of the articles without deleteriously affecting the non-electroplatable portions.

The method of JP '588 differs from the instant invention because JP '588 does not disclose the following:

- a. Wherein the solution further comprises an agent to promote anodic dissolution, as recited in claim 29.
- b. Wherein the agent to promote anode dissolution is as potassium methane sulfonate, ammonium chloride or a metal sulfide salt, as recited in claim 30.

JP '588 teaches ammonium chloride as a conductive salt (page 3, lines 19-21).

The invention as a whole would have been obvious to one having ordinary skill in the art at the time the invention because the Applicant has a different reason for, or advantage resulting from doing what the prior art relied upon has suggested, it is noted that it is well settled that this is not demonstrative of nonobviousness. *In re Kronig* 190 USPQ 425, 428 (CCPA 1976); *In re Linter* 173 USPQ 560 (CCPA 1972); the prior art motivation or advantage may be different than that of Applicants while still supporting a conclusion of obviousness. *In re Wiseman* 201 USPQ 658 (CCPA 1979); *Ex parte Obiaya* 227 USPQ 58 (Bd. of App. 1985) and MPEP § 2144.

II. Claims **32-37** are rejected under 35 U.S.C. 103(a) as being unpatentable over **JP 2-301588 ('588)**.

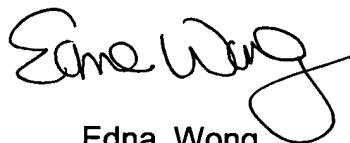
JP '588 is as applied for reasons as discussed above and incorporated herein.

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Edna Wong whose telephone number is (571) 272-1349. The examiner can normally be reached on Mon-Fri 7:30 am to 4:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nam Nguyen can be reached on (571) 272-1342. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Edna Wong
Primary Examiner
Art Unit 1753

EW
May 5, 2006